
Post-Remedial Excavation
Confirmation Sample Report
Parcel A, Report No. 2

McDonnell Douglas C-6 Facility
Los Angeles, California

May 1997



MONTGOMERY WATSON

**POST-REMEDIAL EXCAVATION
CONFIRMATION SAMPLE REPORT
PARCEL A
REPORT NO. 2**

**McDONNELL DOUGLAS C-6 FACILITY
LOS ANGELES, CALIFORNIA**

May 1997

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SECTION 1.0

INTRODUCTION

In October, 1996, Montgomery Watson (Montgomery) was retained by McDonnell Douglas Realty Company (MDRC) to assist with the redevelopment of Parcel A (the Site) of their C-6 facility located in Los Angeles, California. Figure 1 presents the C-6 facility. Figure 2 delineates the Site. The Site was formerly used to manufacture and store aircraft parts.

1.1 OVERVIEW

The Site consists of the northernmost quarter of the C-6 facility, encompassing approximately 50 acres. Demolition of many of the following buildings at the Site is underway: Building 29, 33, 34, 36, 37, 41, 43/44, 45, 57, 58, 61, 66-A and 67.

Information gathered during the data compilation and evaluation phase of this project indicated the presence of petroleum products and hazardous substances in the surface and subsurface.

A soil sampling and remedial excavation effort is being conducted in conjunction with the removal of foundations, slabs, and below-ground structures. The purpose of this effort is to assess soil quality and remove soil affected with petroleum hydrocarbons and other chemicals in preparation for redevelopment of the Site. Soil which is determined to be affected with petroleum hydrocarbons and other chemicals is excavated and stockpiled at the Site. Confirmation samples are collected along the walls and floor of each remedial excavation to ensure that affected soil has been removed.

Confirmation sampling activities discussed in this report are from remedial excavation activities conducted at Building 37 only.

1.2 PURPOSE AND OBJECTIVE

This document presents the results of confirmation sampling conducted in Building 37 excavation areas. Specifically, this document is the second in a series of confirmation sample reports which follows the facility-wide strategy for assessing and screening the analytical data to confirm that the areas, which were contaminated with petroleum hydrocarbons and other chemicals, have been excavated to acceptable levels.

The final residual chemical concentrations in the excavated area must meet cleanup criteria established for the Site and the C-6 facility.

Along with its companion document, *Soil Stockpile Report, Parcel A, Report No. 2* (Montgomery Watson, 1997(d)), this report documents that the Site excavation efforts meet the established cleanup criteria and therefore protect drinking water and the health of future users.

SECTION 2.0

BUILDING 37 REMEDIAL EXCAVATIONS

Building 37 housed foundry operations in the south central portion of the building, and large machine presses and lathes throughout the building. Foundry and press machines were contained in 15 large pits (approximately 8 feet deep, 20 feet wide, and 60 feet long). A ground floor room on the east side of the building housed the tooling department where employees would produce parts for the machines throughout the facility. A parts cleaning tank sat in a sump within this room. Two clarifiers were located outside the east wall of the building. A hydraulically-powered elevator was located inside the northeast portion of the building.

A 20 feet by 20 feet grid has been superimposed over the footprint of Building 37 as presented in Figure 3. The location of each remedial excavation discussed in this report is presented in Figure 3. Remedial excavations were recorded using the following nomenclature:

Building No. (B#) - Remedial Excavation (RE) - Chronological Number (#)
e.g., B37-RE-4

Pertinent information related to the Building 37 remedial excavations and the stockpiled soils discussed in this report is presented below.

Excavation/Stockpile(s)	Approximate Volume	Date of Excavation	Stockpile Location(s)
B37-RE-2/B	36 cu yds	8 Apr 97	East of Building 29
B37-RE-2/C	280 cu yds	8,9 Apr 97	East of Building 61
B37-RE-4/U — AL	3895 cu yds total	31 Mar 97 — 24 Apr 97	Within and adjacent to the footprint of Building 61.

2.1 SOIL SAMPLING AND EXCAVATING

Grid sampling and hot spot sampling has been employed at Building 37 to identify affected soil and to evaluate the need to remove it through remedial excavation. Detailed procedures for these activities are outlined in the *Sampling and Analysis Plan for Demolition Activities at the Douglas Aircraft Company C-6 Facility* prepared by Integrated Environmental Services, Inc. and previously submitted to the Regional Water Quality Control Board

(RWQCB). The procedures used to assess soil quality and determine if remedial excavation was necessary can be summarized as follows:

Grid Sampling: The systematic collection of soil samples was performed at predetermined, regular intervals of a grid placed over the footprint of Building 37. A 20 feet by 20 feet grid was employed. A photoionization detector (PID) was used to measure headspace organic vapor concentrations in the freshly exposed soil at each grid node. Soil samples were collected for analysis where at least one of the following conditions existed: 1) the headspace VOC reading exceeded 5 ppm, (2) areas where staining of the soil was visible, or (3) areas where odors were noticeable. Generally, grid samples have been analyzed according to the analytical schedule presented in Table 1.

Hot Spot Sampling: Hot spot sampling was conducted at pre-determined locations where former items of concern were located (e.g., pits, sumps), and at other locations where demolition activities revealed soil which may have been affected by petroleum hydrocarbons or other chemicals of concern. Hot spot samples were collected for chemical analysis from a location where at least one of the following conditions existed: (1) the headspace VOC reading exceeded 5 ppm, (2) areas where staining of the soil was visible, or (3) areas where odors were noticeable. Generally, hot spot samples have been analyzed according to the analytical schedule presented in Table 1.

Remedial excavation to remove affected soil was conducted when one of the following conditions was discovered: (1) elevated PID readings, (2) visible staining, or (3) noticeable odors. A conservative approach was employed such that soil which exhibited any of these characteristics was excavated and stockpiled.

Remedial excavations were performed using heavy equipment (excavators, front-end loaders) associated with the building demolition effort. Air monitoring in accordance with South Coast Air Quality Management District Rule 1166 was conducted.

The maximum depth of any excavation was approximately 10 feet below grade. Excavated soil was segregated based on the location from where it was removed. Soil stockpiles were placed on asphalt or plastic sheeting, and covered with plastic sheeting to protect the soil from the elements. A sample of the excavated soil (stockpile sample) was collected and analyzed for approximately each 250 cubic yards of material.

Stockpile sampling: Stockpile samples were collected at a frequency of approximately one sample per 250 cubic yards of soil removed. Samples from the stockpiled soil were collected by using a shovel to cut vertically into the side of a stockpile at each sample location to expose "fresh" soil; samples were then collected from the exposed vertical wall.

Generally, stockpile samples have been analyzed according to the analytical schedule presented in Table 1.

2.2 CONFIRMATION SAMPLING

Confirmation sampling was conducted to ensure that affected soil had been removed from each excavation. Confirmation sampling was conducted at a frequency of at least one sample location each 20 feet along the walls and floor of each excavation. Soil removal continued at a particular location until the following conditions were met: 1) the headspace VOC reading in freshly exposed soil was less than or equal to 5 ppm, (2) soil staining was not visible, and (3) odors were not noticeable. A confirmation sample was collected when these conditions were met.

Confirmation soil samples were collected by first exposing "fresh" soil beneath the surface of a wall and floor of an excavation using a stainless steel utensil or similar device. Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve.

Building No. (B#) - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)
e.g., B37-GS-42-3'

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Generally, confirmation samples have been analyzed according to the analytical schedule presented in Table 1.

2.3 IN SITU SOIL QUALITY

2.3.1 B37-RE-2 Remedial Excavation

Initial soil removal at remedial excavation B37-RE-2 was conducted on February 28, 1997 as previously reported by Montgomery Watson (1997(b)).

Additional soil removal at remedial excavation B37-RE-2 was completed on April 9, 1997. Approximately 36 cubic yards of stockpiled soil associated with this additional excavation was removed with an excavator, transported and stockpiled east of Building 29. Additionally, approximately 280 cubic yards of soil was stockpiled east of Building 61.

Two confirmation samples were collected at locations presented in Figure 4. The analytical data for these samples are summarized in Table 2. A complete set of laboratory analytical reports is presented in Appendix A-1.

2.3.2 B37-RE-4 Remedial Excavation

Initial soil removal at remedial excavation B37-RE-4 was conducted from March 3, 1997 through March 31, 1997 as previously reported by Montgomery Watson (1997(b)); however, additional stockpile samples associated with this remedial excavation were collected as late as April 17, 1997. The limits of remedial excavation B37-RE-4 presented in Figure 3 and Figure 5 have been amended from those presented in the *Post-Remedial Excavation Confirmation Sample Report No. 1* (Montgomery Watson, 1997(b)) to more accurately reflect the limits of the initial and additional excavation.

Additional soil removal at remedial excavation B37-RE-4 was conducted on March 31, 1997 through April 24, 1997. Approximately 3895 cubic yards of stockpiled soil associated with this additional excavation was removed with an excavator, transported and stockpiled within and adjacent to the footprint of Building 61.

Thirty-seven confirmation samples were collected at locations presented in Figure 5. The analytical data for these samples are summarized in Table 3. A complete set of laboratory analytical reports is presented in Appendix A-2.

SECTION 3.0

DATA SUMMARY AND CONCLUSIONS

This section summarizes the confirmation sampling data from each remedial excavation discussed in this report and concludes whether all affected soil has been removed, or if additional excavation of affected soil is warranted to be protective of drinking water and human health.

3.1 SOIL SCREENING METHODOLOGY

The soil screening criteria have been developed to satisfy two primary objectives: (1) residual concentrations in soil must be below levels projected to impact underlying drinking water sources, and (2) residual concentrations must be below levels projected to potentially impact human health under future construction and commercial/industrial activities at the Site.

In accordance with these objectives, individual screening criteria were developed for both drinking water and human health protection. The development of each of these screening criteria is discussed below followed by a summary of how these values will be implemented in the evaluation of whether soil which remains at each remedial excavation meets the soil screening criteria.

Chemicals of concern at the Site can be summarized as follows:

- Petroleum hydrocarbons
- VOCs
- SVOCs
- PCBs
- Metals

Drinking Water

The generalized hydrostratigraphic succession at the Site is as follows (Kennedy/Jenks, 1996(b); Dames & Moore, 1993; Department of Water Resources, 1961):

SURFACE

Bellflower Aquitard

Gage Aquifer

El Segundo Aquitard

Lynwood Aquifer

Depth to groundwater at the Site is approximately 65 feet. Hydrostratigraphic information from voluminous data collected at the neighboring Del Amo and Montrose Chemical Superfund Sites can be correlated with subsurface information collected at the Site. Hydrostratigraphic correlations suggest that the shallowest groundwater at the Site occurs in the Bellflower Aquitard, which is not recognized as a drinking water source in the region (Dames & Moore, 1993).

Although the depth to the top of the Gage Aquifer should vary from approximately 120 to 150 feet (from west to east) across the Site, the Gage Aquifer is not utilized as a source of drinking water in the region (Dames & Moore, 1993). Consequently, the shallowest drinking water resource in the region would therefore be the Lynwood Aquifer, projected to occur at the depths of approximately 210 to 240 feet (from west to east) across the Site.

Based on the depth to the first drinking water source, the following permissible concentrations have been approved by the RWQCB:

Analytes	Permissible Level
TRPH	
C4 - C12	2000 mg/kg
C13 - C22	10,000 mg/kg
C22+	50,000 mg/kg
Metals	TTLC and 10 times STLC

Note:

A waste extraction test is performed on samples with concentrations greater than 10 times STLC but less than TTLC, per CCR Title 22.

Human Health

Site-specific health-based screening criteria (HBSC) were developed by Integrated Environmental Services, Inc. using standard United States Environmental Protection Agency (USEPA) and California Environmental Protection Agency (Cal/EPA) methodologies. HBSC values were derived assuming future commercial industrial land use with an interim construction phase. Each HBSC will be used as a predictor of the risk posed by individual VOC, SVOC, PCB and metal contaminants in soil. The additive effects of multiple contaminants have been accounted for by setting target risk levels at 1×10^{-6} for carcinogens and 0.2 for toxicants. The final cumulative risks for all contaminants will be addressed in the post-remedial risk assessment. Table 4 summarizes the HBSCs to be used at the Site. Appendix B provides a more detailed discussion of the methodologies used to derive these values.

Evaluation Process

All confirmation soil data at the Site will undergo the soil screening evaluation process depicted in Figure 6. This evaluation process incorporates both drinking water and human health based criteria. Additional soil excavation and/or treatment will be required at locations where confirmation sample data fail any portion of this test.

3.2 REMEDIAL EXCAVATION EVALUATIONS

3.2.1 B37-RE-2 Remedial Excavation

Confirmation sample data are presented in Table 2 and can be summarized as follows:

Petroleum Hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this additional remedial excavation was 23 mg/kg (sample B37-GS-133-6'). This concentration is below the permissible limits for petroleum hydrocarbons.

VOCs: VOCs were not detected.

SVOCs: SVOCs were not detected.

PCBs: Confirmation samples for the additional soil removal activities at B37-RE-2 were not analyzed for PCBs. However, one confirmation sample from the initial B37-RE-2 remedial excavation was analyzed for PCBs and none were detected (Montgomery Watson, 1997(b)).

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in the additional B37-RE-2 excavation are protective of drinking water and human health. Approval to backfill this excavation is requested.

3.2.2 B37-RE-4 Remedial Excavation

Confirmation sample data are presented in Table 3 and can be summarized as follows:

Petroleum hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this additional remedial excavation was 12 mg/kg (sample B37-GS-145-6'). This concentration is below the permissible limit for petroleum hydrocarbons.

VOCs: VOCs were not detected.

SVOCs: Bis(2-ethylhexyl)phthalate was detected in sample B37-GS-137-6' in concentration of 0.420 mg/kg. This concentration is below the 2100 mg/kg bis(2-ethylhexyl)phthalate HBSC.

PCBs: Two confirmation samples were analyzed for PCBs. PCBs were not detected in one sample (B37-GS-145A-6'). The laboratory reported "trace" concentration in the other sample (B37-GS-137A-6').

Metals: All concentrations were below their respective TTLC, 10 times STLC, and HBSC values.

Conclusion: The data indicate that the residual soils in the additional B37-RE-4 excavation are protective of drinking water and human health. Approval to backfill this excavation is requested.

SECTION 4.0

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Figures

Figures



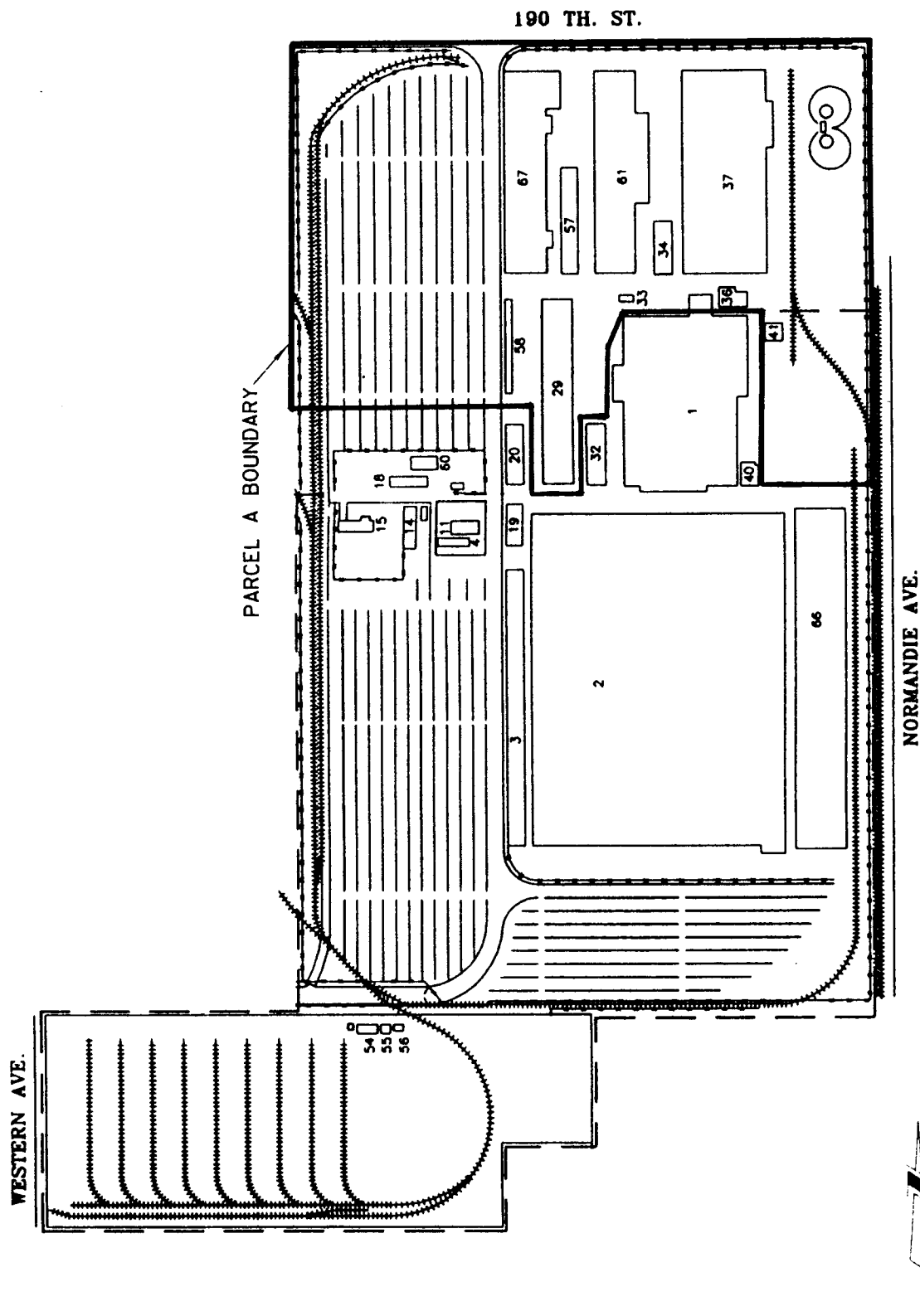
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C-6 FACILITY MAP

FIG. 1



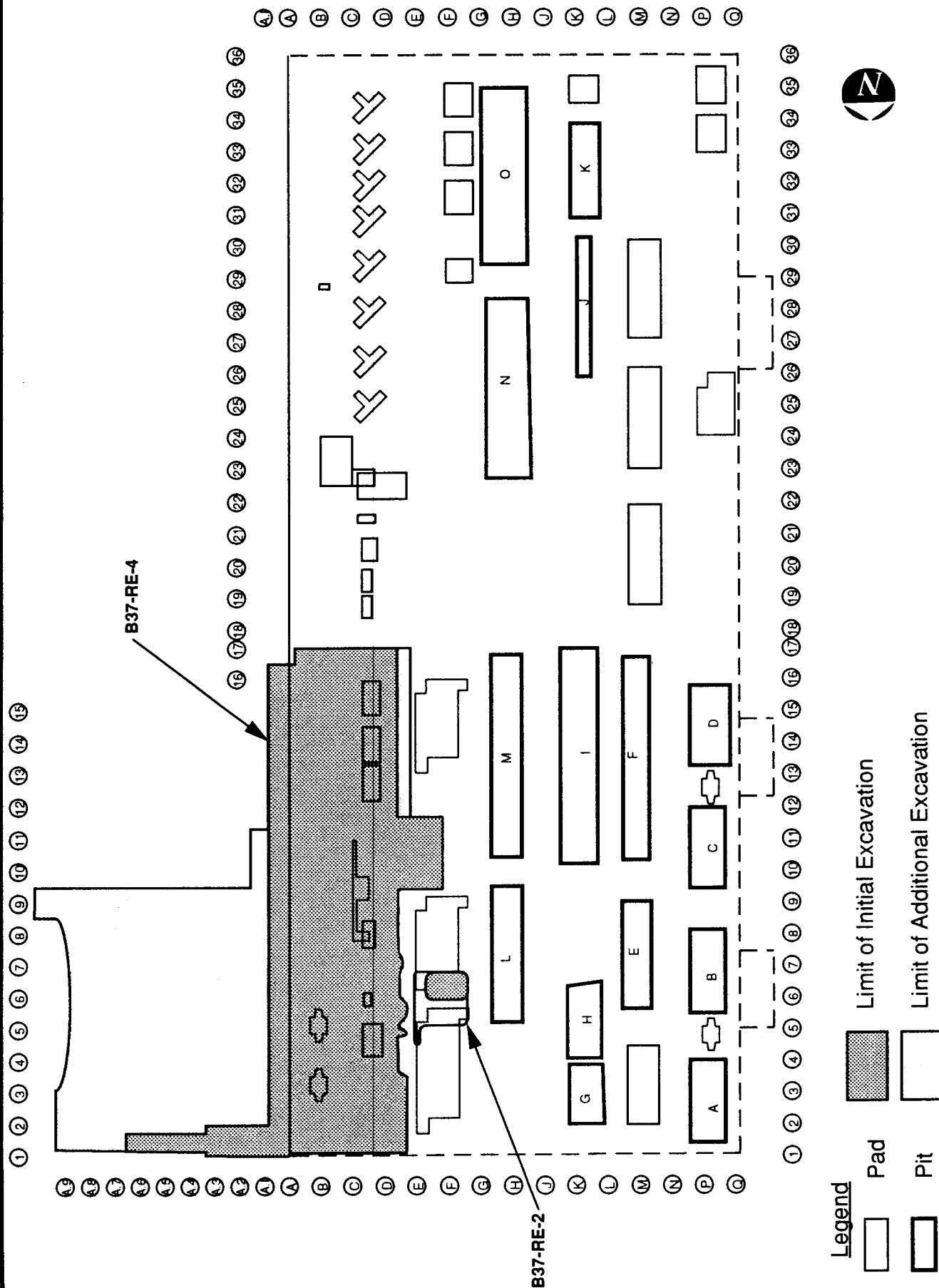


FIGURE 3

BUILDING 37 GRID OUTLINE AND LOCATIONS OF REMEDIAL EXCAVATIONS

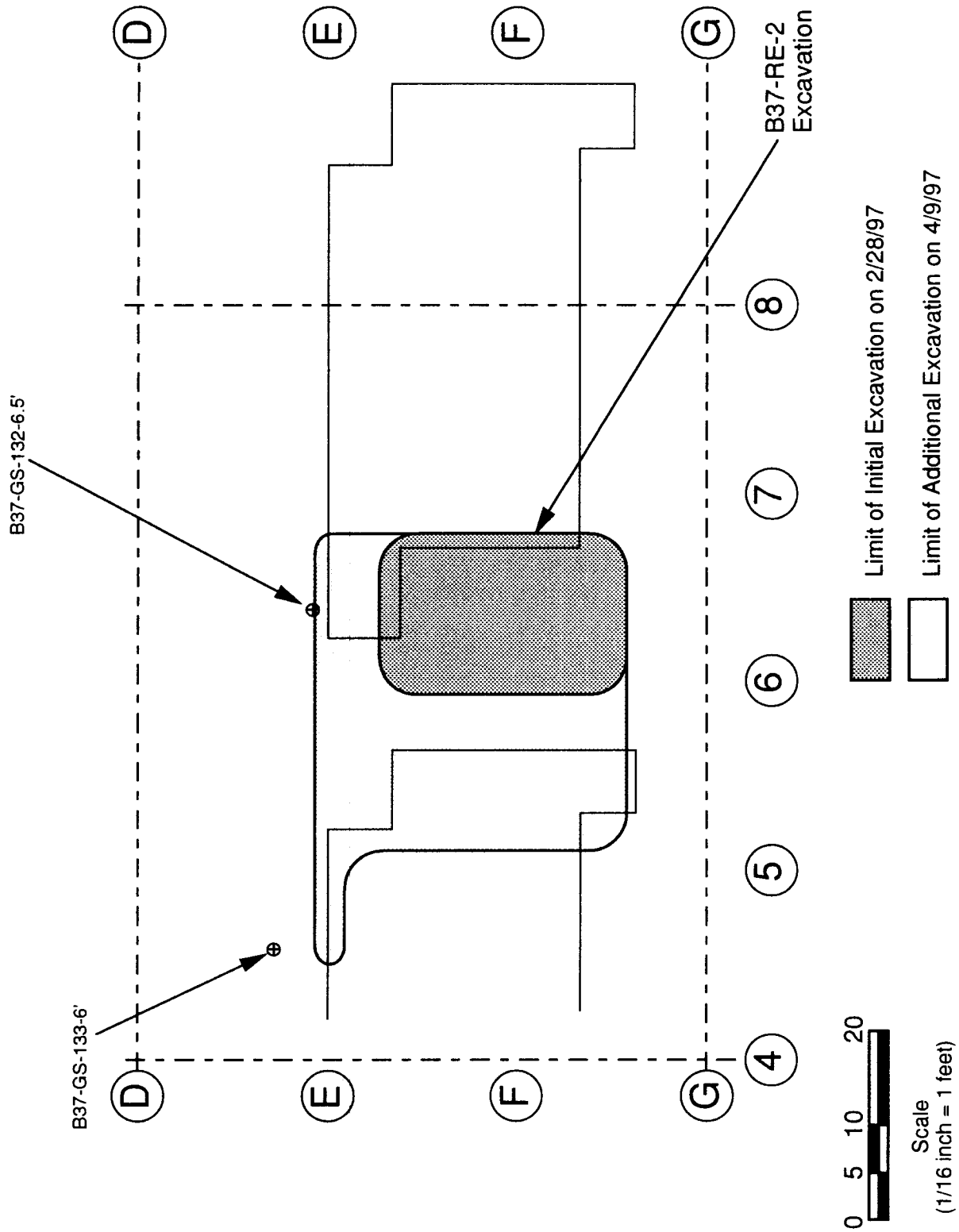
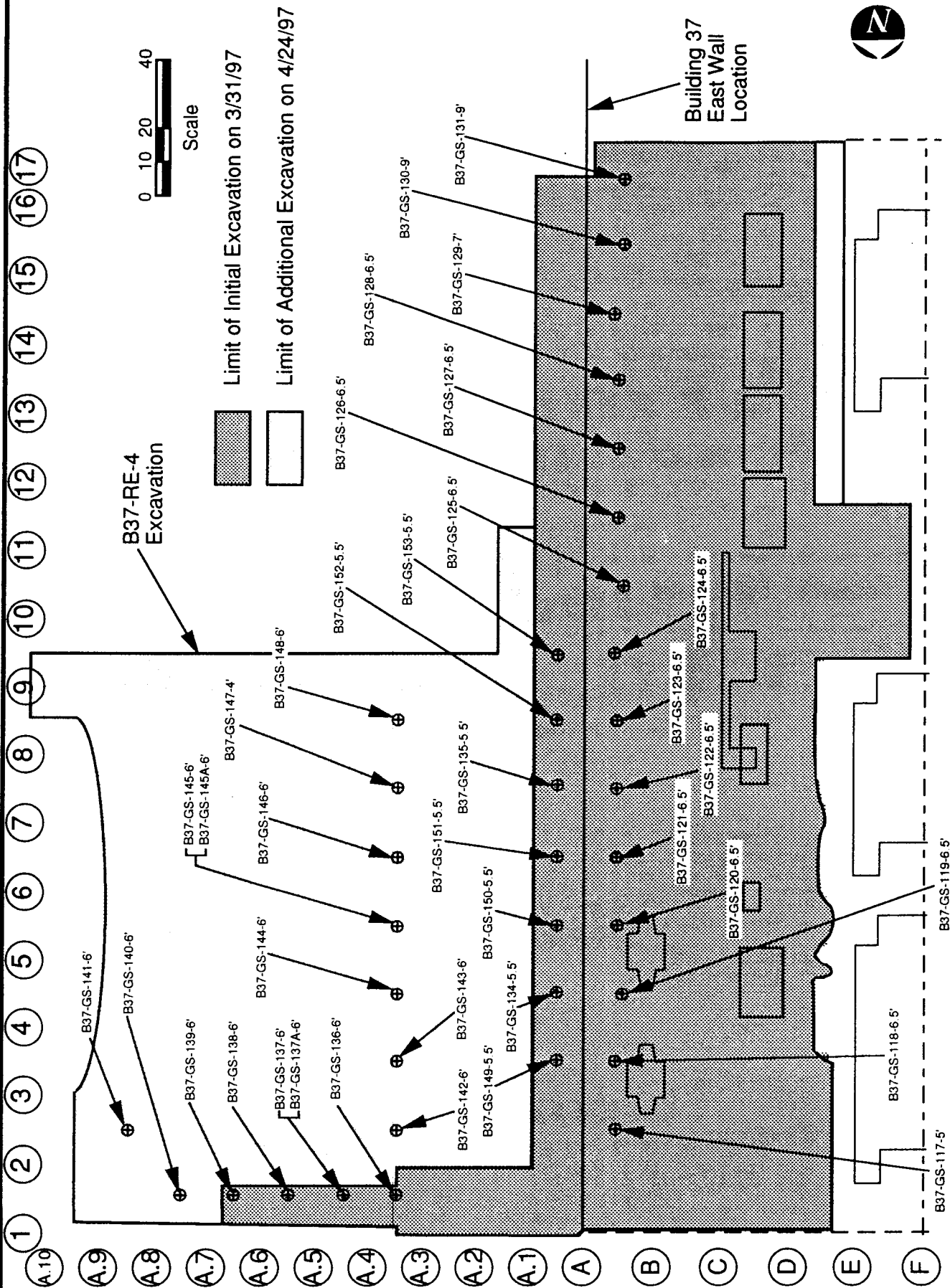


FIGURE 4

Remedial Excavation B37-RE-2 Confirmation Sample Locations

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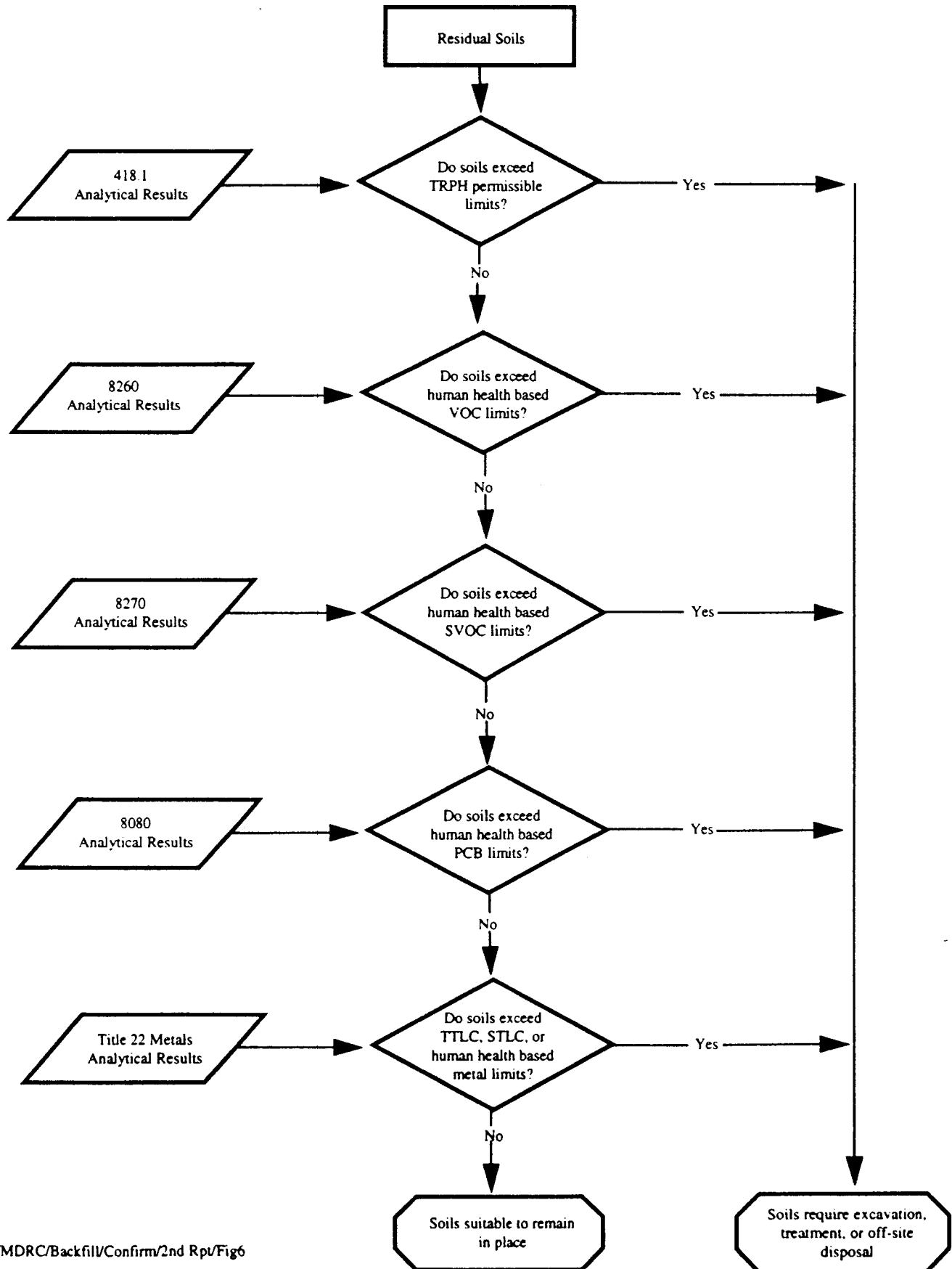


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C-6 FACILITY - BUILDING 37

Remedial Excavation B37-RE-4 Confirmation Sample Locations

FIGURE 5

FIGURE 6
Soil Screening Evaluation Process



Tables



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TABLE 1
Summary of Soil Sample Analytical Methods

Sample Type	EPA Method	Analyte
Grid Sample	418.1 6000/7000 8260 8270	TRPH (a) Metals VOCs SVOCs
Hot Spot Sample	418.1 6000/7000 8260 8270	TRPH (a) Metals VOCs (b) SVOCs (b)
Stockpile Sample	418.1 6000/7000 8260 8270 8080	TRPH (a) Metals VOCs SVOCs PCBs (c)
Confirmation Sample	418.1 6000/7000 8260 8270 8080	TRPH (a) Metals VOCs (d) SVOCs (d) PCBs (e)

Notes:

TRPH Total Recoverable Petroleum Hydrocarbons

VOCs Volatile Organic Compounds

SVOCs Semi-volatile Organic Compounds.

PCBs Polychlorinated Biphenyls

(a) Samples exhibiting TRPH concentration greater than 10,000 mg/kg were submitted for carbon chain analysis.

(b) Only the sample with highest TRPH concentration from a hot spot area was analyzed for VOCs and SVOCs.

(c) One sample per remedial excavation.

(d) The number of confirmation samples analyzed for VOCs and SVOCs is approximately equal to the number of stockpile samples analyzed for VOCs and SVOCs. Confirmation samples are selected for analysis of VOCs and SVOCs based on highest TRPH concentration, and location of evenly spaced confirmation sample locations.

(e) Generally, one sample per each remedial excavation, or following the removal of each 2500 cubic yards of soil, whichever is less.

TABLE 2
Analytical Data Summary
Remedial Excavation B37-RE-2 Confirmation Samples

Analyte		Sample Number, Collection Date, Grid Location and Depth			
		B37-GS-132-6.5'	B37-GS-133-6'		
		4/8/97	4/8/97		
EPA Method	E-6.5 @ 6.5' bgs*	D/E-4.5 @ 6.0' bgs*			
TRPH (mg/kg)	418.1	19	23		
Regulatory Levels					
		TTLc (mg/kg)	10X STLc (mg/L)		
Title 22 Metals (mg/kg)					
Antimony	6010	<5.0	<5.0	500	150
Arsenic	6010	<1.0	<1.0	500	50
Barium	6010	200	90	10,000	1,000
Beryllium	6010	<0.1	<0.1	75	7.5
Cadmium	6010	<0.1	<0.1	100	10
Chromium (VI)	7196	<0.5	<0.5	500	50
Chromium (total)	6010	33	36	2,500	50
Cobalt	6010	5.3	5.3	8,000	800
Copper	6010	17	13	2,500	250
Lead (total)	6010	<1.0	<1.0	1,000	50
Mercury	7471	<0.01	<0.01	20	2
Molybdenum	6010	<0.5	<0.5	3,500	3,500
Nickel	6010	8.9	10	2,000	200
Selenium	6010	<1.0	<1.0	100	10
Silver	6010	<0.1	<0.1	500	50
Thallium	6010	<5.0	<5.0	700	70
Vanadium	6010	33	34	2,400	240
Zinc	6010	53	62	5,000	2,500
VOCs (mg/kg)	8260	--	ND		
SVOCs (mg/kg)	8270	--	ND		
Carbon Chain Range (mg/kg)	sim. dist.	--	--		
PCBs (mg/kg)	8080	--	--		

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

-- = not analyzed

sim. dist. = simulated distillation

VOCs = Volatile Organic Compounds

ND = not detected

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

TTLc = California Total Threshold Limit Concentration

10X STLC = Ten Times the California Soluble Threshold Limit Concentration

bgs = below ground surface

PCBs = Polychlorinated Biphenyls

* Refer to Figure 4 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 1 of 8

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-117-5' 4/1/97	B37-GS-118-6.5' 4/1/97	B37-GS-119-6.5' 4/1/97	B37-GS-120-6.5' 4/1/97	B37-GS-121-6.5' 4/1/97		TTLc (mg/kg)	10X STLc (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0			
Title 22 Metals (mg/kg)									
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0		500	150
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0		500	50
Barium	6010	170	120	110	100	46		10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1		75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1		100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5		500	50
Chromium (total)	6010	31	37	32	18	11		2,500	50
Cobalt	6010	10	12	13	6.8	4.4		8,000	800
Copper	6010	16	21	21	12	8.2		2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0		1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01		20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5		3,500	350
Nickel	6010	9.8	11	9.4	4.5	3.2		2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0		100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1		500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0		700	70
Vanadium	6010	29	37	30	29	12		2,400	240
Zinc	6010	65	68	64	29	21		5,000	2,500
VOCs (mg/kg)	8260	ND	ND	ND	ND	ND			
SVOCs (1) (mg/kg)									
bis (2-Ethylhexyl)Phthalate	8270	<0.100	<0.100	<0.100	<0.100	<0.100			
Carbon Chain Range (mg/kg)									
sim. dist		--	--	--	--	--			
PCBs (1) (mg/kg)									
PCB-1260	8080	--	--	--	--	--			

mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 -- = not analyzed
 bgs = below ground surface
 ND = not detected
 sim dist = simulated distillation
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds
 PCBs = Polychlorinated biphenyls
 (1) SVOCs and PCBs not listed were not detected
 TTLc = California Total Threshold Limit Concentration
 10X STLc = Ten Times the California Soluble Threshold Limit Concentration
 TAPh = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 2 of 8

Analyte		Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-122-6.5' 4/1/97 A/B-7.5 @ 6.5' bgs*	B37-GS-123-6.5' 4/1/97 A/B-8.5 @ 6.5' bgs*	B37-GS-124-6.5' 4/1/97 A/B-9.5 @ 6.5' bgs*	B37-GS-125-6.5' 4/1/97 A/B-10.5 @ 6.5' bgs*	B37-GS-126-6.5' 4/1/97 A/B-11.5 @ 6.5' bgs*	TTLC (mg/kg)	10X STLC (mg/L)	
TRPH (mg/kg)		418.1	<8.0	<8.0	<8.0	<8.0	<8.0		
Title 22 Metals (mg/kg)									
Antimony		6010	<5.0		<5.0		<5.0	150	
Arsenic		6010	<1.0	<1.0	<1.0		<1.0	50	
Barium		6010	130	84	98	120	110	10,000	
Beryllium		6010	<0.1	<0.1	<0.1	<0.1	<0.1	75	
Cadmium		6010	<0.1	<0.1	<0.1	<0.1	<0.1	100	
Chromium (VI)		7196	<0.5	<0.5	<0.5	<0.5	<0.5	50	
Chromium (total)		6010	25	18	22	27	41	50	
Cobalt		6010	8.1	6.4	5.4	19	11	8,000	
Copper		6010	13	11	16	24	25	250	
Lead (total)		6010	<1.0	<1.0	<1.0	<1.0	<1.0	50	
Mercury		7471	<0.01	<0.01	<0.01	<0.01	<0.01	2	
Molybdenum		6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	
Nickel		6010	6.8	6.1	6.5	7.6	14	200	
Selenium		6010	<1.0	<1.0	<1.0	<1.0	<1.0	10	
Silver		6010	<0.1	<0.1	<0.1	<0.1	<0.1	50	
Thallium		6010	<5.0	<5.0	<5.0	<5.0	<5.0	70	
Vanadium		6010	25	22	19	34	40	240	
Zinc		6010	41	26	43	42	69	2,500	
VOCs (mg/kg)		8260	ND	ND	ND	ND	ND		
SVOCs (l) (mg/kg)		8270	<0.100	<0.100	<0.100	<0.100	<0.100		
Carbon Chain Range (mg/kg)		sim. dist	--	--	--	--	--		
PCBs (l) (mg/kg)		8080	--	--	--	--	--		
PCB-1260									

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = not detected

sim. dist. = simulated distillation
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
PCBs = Polychlorinated biphenyls

(1) SVOCs and PCBs not listed were not detected
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 3 of 8

Analyte		Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-127-6.5' 4/1/97	B37-GS-128-6.5' 4/1/97	B37-GS-129-7' 4/1/97	B37-GS-130-9' 4/1/97	B37-GS-131-9' 4/1/97			
EPA Method		A/B-12.5 @ 6.5' bgs*	A/B-13.5 @ 6.5' bgs*	A/B-14.5 @ 7.0' bgs*	A/B-15.5 @ 9' bgs*	A/B-16.5 @ 9.0' bgs*	TTLc (mg/kg)	10X STLC (mg/L)	
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0	500	150	
Title 22 Metals (mg/kg)									
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	500	50	
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	10,000	1,000	
Barium	6010	130	97	93	140	140	75	7.5	
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50	
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	2,500	800	
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	2,500	250	
Chromium (total)	6010	34	44	41	36	32	1,000	50	
Cobalt	6010	6.4	12	11	14	7.9	8,000	800	
Copper	6010	16	16	17	17	17	2,500	250	
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	50	
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20	2	
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	3,500	3,500	
Nickel	6010	9.8	14	13	17	19	2,000	200	
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	100	10	
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	500	50	
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	700	70	
Vanadium	6010	32	35	40	39	28	2,400	240	
Zinc	6010	54	81	64	89	90	5,000	2,500	
VOCs (mg/kg)		ND	ND	ND	ND	ND			
SVOCs (l) (mg/kg)									
bis (2-Ethylhexyl)Phthalate	8270	<0.100	<0.100	<0.100	<0.100	<0.100			
Carbon Chain Range (mg/kg)		sim. dist.	--	--	--	--			
PCBs (l) (mg/kg)									

mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 -- = not analyzed
 bgs = below ground surface
 ND = not detected

sim. dist. = simulated distillation
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds
 PCBs = Polychlorinated biphenyls

(1) SVOCs and PCBs not listed were not detected
 TTLc = California Total Threshold Limit Concentration
 10X STLc = Ten Times the California Soluble Threshold Limit Concentration
 TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 4 of 8

Analyte		Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-134-5.5' 4/16/97	B37-GS-135-5.5' 4/16/97	B37-GS-136-6' 4/18/97	B37-GS-137-6' 4/18/97	B37-GS-137A-6' 5/5/97			
EPA Method	418.1	A/A.1-4.5 @ 5.5' bgs	A/A.1-7.5 @ 5.5' bgs	A.3/A.4-1.5 @ 6.0' bgs	A.4/A.5-1.5 @ 6.0' bgs	A.4/A.5-1.5 @ 6.0' bgs			
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0		TTL (mg/kg)	10X STLC (mg/L)
Title 22 Metals (mg/kg)									
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	--	500	15.0
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	--	500	50
Barium	6010	180	120	110	120	120	--	10,000	1,000
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	--	75	7.5
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	--	100	10
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	--	500	50
Chromium (total)	6010	34	26	22	33	33	--	2,500	50
Cobalt	6010	4.9	4.1	8.0	6.4	6.4	--	8,000	800
Copper	6010	11	8.8	9.0	13	13	--	2,500	250
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	--	1,000	50
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	--	20	2
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	--	3,500	3,500
Nickel	6010	9.0	7.1	7.6	9.2	9.2	--	2,000	200
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	--	100	10
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	--	500	50
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	--	700	70
Vanadium	6010	30	26	21	31	31	--	2,400	240
Zinc	6010	56	45	53	65	65	--	5,000	2,500
VOCs (mg/kg)		8260	ND	ND	ND	ND	--		
SVOCs (1) (mg/kg)									
bis (2-Ethylhexyl)Phthalate		8270	<0.100	<0.100	<0.100	0.420	--		
Carbon Chain Range (mg/kg)		sim dist	--	--	--	--	--		
PCBs (1) (mg/kg)		8080	--	--	--	--	Trace		

mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 -- = not analyzed
 bgs = below ground surface
 ND = not detected
 sim dist = simulated distillation
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds
 PCBs = Polychlorinated biphenyls
 (1) SVOCs and PCBs not listed were not detected
 TTL = California Total Threshold Limit Concentration
 10X STLC = Ten Times the California Soluble Threshold Limit Concentration
 TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 5 of 8

Sample Number, Collection Date, Grid Location and Depth							
Analyte	EPA Method	B37-GS-138-6' 4/18/97 A.5/A.6-1.5 @ 6.0' bgs	B37-GS-139-6' 4/18/97 A.6/A.7-1.5 @ 6.0' bgs	B37-GS-140-6' 4/18/97 A.7/A.8-1.5 @ 6.0' bgs	B37-GS-141-6' 4/18/97 A.8/A.9-2.5 @ 6.0' bgs	B37-GS-142-6' 4/21/97 A.3/A.4-2.5 @ 6.0' bgs	
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0	
Title 22 Metals (mg/kg)							
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Barium	6010	140	110	110	110	130	
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	
Chromium (total)	6010	32	23	26	26	22	
Cobalt	6010	7.3	7.9	7.8	8.1	7.1	
Copper	6010	9.9	7.0	9.4	9.4	1.1	
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	
Nickel	6010	9.0	7.5	9.3	8.7	7.3	
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	
Vanadium	6010	29	23	24	24	20	
Zinc	6010	61	55	64	60	43	
VOCs (mg/kg)	8260	ND	ND	ND	ND	ND	
SVOCs (1) (mg/kg)							
bis (2-Ethylhexyl)Phthalate	8270	<0.100	<0.100	<0.100	<0.100	<0.100	
Carbon Chain Range (mg/kg)							
sim. dist		--	--	--	--	--	
PCBs (1) (mg/kg)							
PCB-1260	8080	--	--	--	--	--	

mp/kg = milligrams per kilogram
mg/L = milligrams per liter
bgs = below ground surface
ND = not detected

sim. dist = simulated distillation
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
PCBs = Polychlorinated biphenyls

(1) SVOCs and PCBs not listed were not detected
TTLc = California Total Threshold Limit Concentration
10X STLc = Ten Times the California Soluble Threshold
TRPH = Total Recoverable Petroleum Hydrocarbons

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = not detected

(1) SVOCs and PCBs not listed were not detected
TTLc = California Total Threshold Limit Concentration
10X STLc = Ten Times the California Soluble Threshold Limit Concentration
TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 6 of 8

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B37-GS-143-6' 4/21/97	B37-GS-144-6' 4/21/97	B37-GS-145-6' 4/21/97	B37-GS-145A-6' 5/5/97	B37-GS-146-6' 4/21/97		TTLc (mg/kg)	10X STLc (mg/L)
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	12	<8.0			
Title 22 Metals (mg/kg)									
Antimony	6010	<5.0	<5.0	<5.0		<5.0			
Arsenic	6010	<1.0	<1.0	<1.0		<1.0			
Barium	6010	120	130	130		120			
Beryllium	6010	<0.1	<0.1	<0.1		<0.1			
Cadmium	6010	<0.1	<0.1	<0.1		<0.1			
Chromium (VI)	7196	<0.5	<0.5	<0.5		<0.5			
Chromium (total)	6010	26	26	26		34			
Cobalt	6010	9.4	10	6.1		4.5			
Copper	6010	12	12	14		14			
Lead (total)	6010	<1.0	<1.0	<1.0		<1.0			
Mercury	7471	<0.01	<0.01	<0.01		<0.01			
Molybdenum	6010	<0.5	<0.5	<0.5		<0.5			
Nickel	6010	6.9	8.5	8.2		9.4			
Selenium	6010	<1.0	<1.0	<1.0		<1.0			
Silver	6010	<0.1	<0.1	<0.1		<0.1			
Thallium	6010	<5.0	<5.0	<5.0		<5.0			
Vanadium	6010	28	24	23		28			
Zinc	6010	43	51	51		53			
VOCs (mg/kg)	8260	ND		ND					
SVOCs (1) (mg/kg)									
bis (2-Ethylhexyl)Phthalate	8270	0.380		0.250					
Carbon Chain Range (mg/kg)									
sim. dist.									
PCBs (1) (mg/kg)									
PCB-1260	8080				ND				

mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 -- = not analyzed
 bgs = below ground surface
 ND = not detected
 sim. dist. = simulated distillation
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds
 PCBs = Polychlorinated biphenyls
 (1) SVOCs and PCBs not listed were not detected
 TTLc = California Total Threshold Limit Concentration
 10X STLc = Ten Times the California Soluble Threshold Limit Concentration
 TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
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		Sample Number, Collection Date, Grid Location and Depth					
Analyte	EPA Method	B37-GS-147-4' 4/21/97	B37-GS-148-6' 4/21/97	B37-GS-149-5.5' 4/21/97	B37-GS-150-5.5' 4/21/97	B37-GS-151-5.5' 4/21/97	
		A.3/A.4-7.5 @ 6.0' bgs	A.3/A.4-8.5 @ 6.0' bgs	A/A.1-3.5 @ 6.0' bgs	A/A.1-5.5 @ 5.5' bgs	A/A.1-6.5 @ 5.5' bgs	
TRPH (mg/kg)	418.1	<8.0	<8.0	<8.0	<8.0	<8.0	
Title 22 Metals (mg/kg)							
Antimony	6010	<5.0	<5.0	<5.0	<5.0	<5.0	
Arsenic	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Barium	6010	100	100	110	68	100	
Beryllium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Cadmium	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Chromium (VI)	7196	<0.5	<0.5	<0.5	<0.5	<0.5	
Chromium (total)	6010	21	21	25	21	24	
Cobalt	6010	8.7	7.3	7.1	8.6	6.7	
Copper	6010	9.5	14	12	16	13	
Lead (total)	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	
Molybdenum	6010	<0.5	<0.5	<0.5	<0.5	<0.5	
Nickel	6010	7.0	7.7	8.5	7.6	8.1	
Selenium	6010	<1.0	<1.0	<1.0	<1.0	<1.0	
Silver	6010	<0.1	<0.1	<0.1	<0.1	<0.1	
Thallium	6010	<5.0	<5.0	<5.0	<5.0	<5.0	
Vanadium	6010	19	19	23	18	22	
Zinc	6010	41	47	47	43	52	
VOCs (mg/kg)	8260	ND	--	ND	--	ND	
SVOCs (1) (mg/kg)							
bis (2-Ethylhexyl)Phthalate	8270	<0.100	--	<0.100	--	0.140	
Carbon Chain Range (mg/kg)							
sim. dist		--	--	--	--	--	
PCBs (1) (mg/kg)							
PCB-1260	8080	--	--	--	--	--	

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
bgs = below ground
ND = not detected

(1) SVOCs and PCBs not listed were not detected
TTLC = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

(1) SVOCs and PCBs not listed were not detected
TTL = California Total Threshold Limit Concentration
10X STLC = Ten Times the California Soluble Threshold Limit Concentration
TRPH = Total Recoverable Petroleum Hydrocarbons

sim. dist. = simulated distillation
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
PCBs = Polychlorinated biphenyls

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = not detected

TABLE 3
Analytical Data Summary
Remedial Excavation B37-RE-4 Confirmation Samples
Page 8 of 8

Analyte		EPA Method		Sample Number, Collection Date, Grid Location and Depth	
B37-GS-152-5.5'		4/21/97		B37-GS-153-5.5'	
A/A.1-8.5 @ 5.5' bgs		4/21/97		A/A.1-9.5 @ 5.5' bgs	
TRPH (mg/kg)		418.1		<8.0	<8.0
Title 22 Metals (mg/kg)					
Antimony		6010		<5.0	<5.0
Arsenic		6010		<1.0	<1.0
Barium		6010		79	82
Beryllium		6010		<0.1	<0.1
Cadmium		6010		<0.1	<0.1
Chromium (VI)		7196		<0.5	<0.5
Chromium (total)		6010		26	16
Cobalt		6010		6.7	3.0
Copper		6010		13	6.0
Lead (total)		6010		<1.0	<1.0
Mercury		7471		<0.01	<0.01
Molybdenum		6010		<0.5	<0.5
Nickel		6010		7.8	3.4
Selenium		6010		<1.0	<1.0
Silver		6010		<0.1	<0.1
Thallium		6010		<5.0	<5.0
Vanadium		6010		31	19
Zinc		6010		53	18
VOCs (mg/kg)		8260		--	ND
SVOCs (l) (mg/kg)					
bis (2-Ethylhexyl)Phthalate		8270		--	<0.100
Carbon Chain Range (mg/kg)					
		sim. dist		--	--
PCBs (l) (mg/kg)					
PCB-1260		8080		--	--

mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 -- = not analyzed
 bgs = below ground surface
 ND = not detected

sim. dist = simulated distillation
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds
 PCBs = Polychlorinated biphenyls

(1) SVOCs and PCBs not listed were not detected
 TLC = California Total Threshold Limit Concentration
 10X STLC = Ten Times the California Soluble Threshold Limit Concentration
 TRPH = Total Recoverable Petroleum Hydrocarbons

* Refer to Figure 5 for sample locations

TABLE 4
Draft Health-Based Screening Criteria (HBSC)
(Page 1 of 4)

Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
1,1,1,2-tetrachloroethane	4.19E+02	2.40E+03	4.19E+02
1,1,2,2-tetrachloroethane	5.29E+01	2.50E+02	5.29E+01
1,1,2-trichloroethane	1.56E+02	1.59E+02	1.56E+02
1,1-dichloroethane	1.06E+03	1.88E+02	1.88E+02
1,1-dichloroethene	1.58E+00	6.82E-02	6.82E-02
1,2,3-trichloropropane	1.97E+00	NA	1.97E+00
1,2,4-trichlorobenzene	1.74E+02	7.91E+06	1.74E+02
1,2-dibromo-3-chloropropane	2.09E+00	1.25E+01	2.09E+00
1,2-dibromoethane	4.71E+00	4.08E+01	4.71E+00
1,2-dichlorobenzene	NA	1.00E+06	1.00E+06
1,2-dichloroethane	1.14E+02	3.76E+01	3.76E+01
1,2-dichloropropane	6.74E+00	1.21E+00	1.21E+00
1,2-diphenylhydrazine	2.03E+01	3.93E+07	2.03E+01
1,3-dichloropropene	3.69E+01	1.11E+02	3.69E+01
1,4-dichlorobenzene	3.97E+02	7.30E+03	3.97E+02
2,4,5-trichlorophenol	1.70E+04	NA	1.70E+04
2,4,6-trichlorophenol	2.51E+02	1.84E+06	2.51E+02
2,4-dichlorophenol	5.15E+01	NA	5.15E+01
2,4-dimethylphenol	3.46E+03	NA	3.46E+03
2,4-dinitrophenol	1.98E+00	NA	1.98E+00
2,4-dinitrotoluene	3.48E+01	1.27E+06	3.48E+01
2,6-dinitrotoluene	2.58E+01	NA	2.58E+01
2-butanone	2.66E+04	3.92E+05	2.66E+04
2-chlorophenol	8.04E+02	NA	8.04E+02
2-methylphenol	8.44E+03	NA	8.44E+03
2-naphthylamine	9.79E+00	2.72E+05	9.79E+00
3,3-dichlorobenzidine	1.47E+01	1.25E+08	1.47E+01
4,4-ddd	1.03E+02	1.67E+08	1.03E+02
4,4-dde	7.24E+01	4.72E+05	7.24E+01
4,4-ddt	1.22E+01	3.78E+07	1.22E+01
4-chloroaniline	6.76E+01	NA	6.76E+01
4-methyl-2-pentanone	7.68E+03	1.14E+05	7.68E+03
4-methylphenol	8.59E+01	NA	8.59E+01
acenaphthene	7.98E+03	NA	7.98E+03
acetone	1.74E+04	NA	1.74E+04

TABLE 4
Draft Health-Based Screening Criteria (HBSC)
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Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
aldrin	7.33E-01	4.50E+03	7.33E-01
alpha-bhc	3.91E+00	3.87E+04	3.91E+00
aniline	7.38E+02	1.70E+06	7.38E+02
anthracene	4.06E+03	NA	4.06E+03
antimony	9.05E+00	NA	9.05E+00
aroclor 1254	8.72E-01	NA	8.72E-01
arsenic	8.87E+00	NA	8.87E+00
barium	2.52E+03	NA	2.52E+03
benzene	7.87E+01	2.50E+01	2.50E+01
benzidine	3.47E-02	2.58E+01	3.47E-02
benzo(a)anthracene	1.14E+01	3.32E+08	1.14E+01
benzo(a)pyrene	1.14E+00	1.60E+07	1.14E+00
benzo(b)fluoranthene	1.14E+01	5.35E+07	1.14E+01
benzo(k)fluoranthene	1.14E+01	1.60E+07	1.14E+01
benzoic acid	6.97E+04	NA	6.97E+04
benzyl alcohol	1.74E+04	NA	1.74E+04
benzyl chloride	8.79E+01	6.72E+02	8.79E+01
beryllium**	1.82E+02	NA	1.82E+02
beta-bhc	1.37E+01	1.65E+06	1.37E+01
beta-chloronaphthalene***	NA	3.92E+06	3.92E+06
bis(2-chloro-1-methylethyl)ether	2.35E+02	4.88E+03	2.35E+02
bis(2-chloroethyl)ether	6.34E+00	1.15E+02	6.34E+00
bis(2-ethylhexyl)phthalate	2.10E+03	1.31E+10	2.10E+03
bromodichloromethane	1.45E+01	NA	1.45E+01
bromoform	3.49E+02	1.32E+04	3.49E+02
bromomethane	NA	1.92E+01	1.92E+01
cadmium**	1.64E+01	NA	1.64E+01
carbon disulfide	8.27E+02	1.17E+04	8.27E+02
carbon tetrachloride	6.18E+01	3.12E+01	3.12E+01
chlorobenzene	NA	1.08E+04	1.08E+04
chloroform	1.85E+02	1.35E+02	1.35E+02
chloromethane	2.64E+02	1.23E+01	1.23E+01
chromium iii	3.22E+04	NA	3.22E+04
chromium vi	9.73E+01	NA	9.73E+01
chrysene	1.14E+02	2.32E+09	1.14E+02

TABLE 4
Draft Health-Based Screening Criteria (HBSC)
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Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
cis-1,2-dichloroethene	1.74E+03	NA	1.74E+03
copper	1.26E+03	NA	1.26E+03
cumene	1.34E+03	9.56E+03	1.34E+03
dibenzo(a,h)anthracene	3.35E+00	1.06E+11	3.35E+00
dibromochloromethane	1.02E+02	5.63E+01	5.63E+01
dichlorodifluoromethane	4.80E+02	1.17E+02	1.17E+02
dieldrin	1.22E+00	3.87E+03	1.22E+00
diethyl phthalate	1.39E+05	NA	1.39E+05
di-n-butylphthalate	1.74E+04	NA	1.74E+04
di-n-octylphthalate	3.49E+02	NA	3.49E+02
endosulfan	1.47E+02	NA	1.47E+02
endrin	7.33E+00	NA	7.33E+00
ethyl chloride	2.84E+04	2.61E+05	2.84E+04
ethylbenzene	NA	1.56E+05	1.56E+05
fluoranthene	6.97E+03	NA	6.97E+03
fluorene	6.97E+03	NA	6.97E+03
gamma-bhc	2.30E+01	4.39E+04	2.30E+01
heptachlor	2.77E+00	2.97E+02	2.77E+00
heptachlor epoxide	3.18E-01	2.25E+02	3.18E-01
hexachlorobenzene	9.20E+00	4.66E+02	9.20E+00
hexachlorobutadiene	2.13E+02	1.19E+04	2.13E+02
hexachlorocyclopentadiene	1.88E+01	1.63E+02	1.88E+01
hexachloroethane	1.74E+02	4.00E+04	1.74E+02
indeno(1,2,3-cd)pyrene	1.47E+01	2.05E+10	1.47E+01
isophorone	1.81E+04	NA	1.81E+04
mercury	6.78E+00	NA	6.78E+00
methylene chloride	8.31E+02	2.20E+02	2.20E+02
molybdenum	1.24E+03	NA	1.24E+03
n-butylbenzyl phthalate	3.49E+03	NA	3.49E+03
nickel	3.70E+02	NA	3.70E+02
nitroaniline, o-	1.62E+03	4.08E+05	1.62E+03
nitrobenzene	8.20E+01	2.97E+04	8.20E+01
nitrosodiphenylamine, p-	7.95E+02	1.72E+06	7.95E+02
n-nitrosodimethylamine	1.10E+00	NA	1.10E+00
n-nitroso-di-n-propylamine	2.33E+00	7.44E+01	2.33E+00

TABLE 4
Draft Health-Based Screening Criteria (HBSC)
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Compounds	Const. Worker Exposure Scenario (mg/kg)	Com/Ind Worker Exposure Scenario (mg/kg)	Proposed HBSC (mg/kg)
n-nitrosodiphenylamine	1.94E+03	4.20E+06	1.94E+03
o-chlorotoluene	3.49E+03	NA	3.49E+03
pentachlorophenol	3.05E+02	2.17E+09	3.05E+02
phenol	1.05E+04	NA	1.05E+04
pyrene	2.35E+03	NA	2.35E+03
selenium	1.77E+02	NA	1.77E+02
silver	5.98E+01	NA	5.98E+01
styrene	6.03E+04	1.26E+06	6.03E+04
tetrachloroethene	2.48E+02	8.20E+01	8.20E+01
toluene	3.70E+04	3.71E+04	3.70E+04
trans-1,2-dichloroethene	3.49E+03	NA	3.49E+03
trichloroethene	7.08E+02	3.41E+02	3.41E+02
trichlorofluoromethane	6.27E+03	8.16E+03	6.27E+03
vanadium	8.37E+01	NA	8.37E+01
vinyl acetate	1.44E+03	3.86E+04	1.44E+03
vinyl chloride	3.13E-01	8.05E-03	8.05E-03
xylene***	2.16E+04	1.35E+06	2.16E+04
zinc	8.26E+03	NA	8.26E+03

Notes:

- NA The required toxicity factors (subchronic - const. or inhalation - C/I) under the applicable exposure scenario were unavailable
- * All HBSC are base on a hazard quotient of 0.2 and an incremental lifetime cancer risk of 1×10^{-6}
- ** No oral cancer potency factor was used for these compounds based on conversations with Jim Collins at Air Toxicology and Epidemiology Section (ATES), Office of Environmental Health Hazard Assessment (OEHHA), April 30, 1997
- *** Due to the lack of toxicity data, chronic oral toxicity factors were used as inhalation toxicity factors for the purposes of deriving acceptable HBSC values